

LISTING OF THE CLAIMS

A complete listing of the claims is provided below. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A device for feeding particulate material, comprising:

a conveyor belt that conveys the material in a forward longitudinal direction;

a material inlet located above at least a first portion of the conveyor belt; and

a movable plate having a hinged end and a free end and located above at least a second portion of the conveyor belt, said movable plate pivotally mounted at said hinged end by a hinge to said material inlet and movable to at least one position where the plate is at an angle to the forward longitudinal direction and the angle is greater than 0 and less than 90 degrees, so that the plate provides a force against the particulate material to inhibit the particulate material from free flowing at a speed greater than the conveying speed of the conveying belt; and

a fixed plate positioned at said inlet opening above said conveyor belt, wherein said fixed plate combines with said movable plate to provide a constant, vertical planar area of particulate indicative of a desired volumetric feed rate.

2. (Original) A device according to claim 1, wherein the plate is mounted for pivotal movement.

3. (Original) A device according to claim 1, further comprising a hinge that supports the plate for pivotal movement.

4. (Original) A device according to claim 1, further comprising a power actuator that moves the plate.
5. (Original) A device according to claim 4, wherein the power actuator is an air cylinder.
6. (Original) A device according to claim 4, further comprising a controller that controls the force applied by the plate.
7. (Original) A device according to claim 1, further comprising a controller that controls the position of the plate.
8. (Original) A device according to claim 1, wherein the plate is mounted for movement to a first position at which the plate substantially prevents movement of coal in the longitudinal direction.
9. (Original) A device according to claim 1, further comprising a pair of side skirts extending substantially along at least a portion of the length of the conveyor.
10. (Original) A device according to claim 9, further comprising a rear end skirt that extends across the width of the belt located in a rearward direction from the material inlet.

11. (Currently Amended) A device for feeding particulate material, comprising:

means for conveying the material in a first longitudinal direction;

a material inlet means located above at least a first portion of the means for conveying the material;

a movable plate having a hinged end and a free end and located above at least a second portion of the conveying means, said movable plate pivotally mounted at said hinged end by a hinge to said material inlet means and movable to at least one position where the plate is at an angle to the forward longitudinal direction and the angle is greater than 0 and less than 90 degrees, so that the plate provides a force against the particulate material to inhibit the particulate material from free flowing at a speed greater than the conveying speed of the conveying belt;

a fixed plate positioned at said material inlet means positioned above said means for conveying the material, wherein said fixed plate combines with said movable plate to provide a constant, vertical planar area of particulate indicative of a desired volumetric feed rate; and

means for urging the movable plate against the material to apply the force against the material.

12. (Original) A device according to claim 11, further comprising means for supporting the plate for pivotal movement.

13. (Original) A device according to claim 11, further comprising a power actuating means for moving the plate.

14. (Original) A device according to claim 13, further comprising means for controlling the force applied by the plate.

15. (Original) A device according to claim 13, further comprising means for controlling the position of the plate.

16. (Currently Amended) A method for feeding particulate material, comprising:  
conveying the material in a first longitudinal direction; ~~and~~  
urging a movable plate having a hinged end and a free end against the material to apply a force against the material in a direction other than the first longitudinal direction, the movable plate pivotally mounted at the hinged end by a hinge to a material inlet and movable to at least one position where the plate is at an angle to the forward longitudinal direction and the angle is greater than 0 and less than 90 degrees, so that the plate provides the force against the particulate material to inhibit the particulate material from free flowing at a speed greater than the conveying speed of the conveying belt;

positioning a fixed plate at the inlet opening, above the conveyor belt; and  
contacting the fixed plate with the particulate material, wherein the fixed plate combines  
with the movable plate to provide a constant, vertical planar area of particulate indicative of a  
desired volumetric feed rate.

17. (Original) A method according to claim 16, further comprising the step of supporting the plate for pivotal movement.

18. (Original) A method according to claim 16, further comprising the step of moving the plate by a power actuator.

19. (Original) A method according to claim 16, further comprising the step of controlling the force applied by the plate.

20. (Original) A method according to claim 16, further comprising the step of controlling the position of the plate.